UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID DELGADO

Appeal 2008-0558
Application 10/679,880
Technology Center 1700

Decided: January 16, 2008

Before BRADLEY R. GARRIS, THOMAS A. WALTZ, and KAREN M. HASTINGS, *Administrative Patent Judges*.

HASTINGS, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1, 3-27, 35, and 37-42, which are the only claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm the rejections of claims 18-27, reverse the rejections of claims 1, 3-17, 35, and 37-42, and set forth a new ground of rejection of claims 35, 37, 38, 40, and 41.

I. BACKGROUND

The invention relates to a welding implement. Independent claims 1, 10, 18, and 35 are illustrative:

1. A flexible welding implement, comprising:

a torch head operable to couple electricity to a welding electrode disposed therein;

a cooling fluid supply tube operable to convey a cooling fluid to the torch head;

a cooling fluid return tube operable to convey the cooling fluid from the torch head;

a first biasing member comprising a helix of non-tubular material defining an axial flow path and operable to flexibly and fluidicly couple the cooling fluid supply tube to the torch head such that the cooling fluid flows axially through the flow path of the first biasing member; and

a second biasing member comprising a helix of non-tubular material defining an axial flow path and operable to flexibly couple the cooling fluid return tube to the torch head.

10. A flexible welding implement, comprising:

a torch coupleable to a handle, comprising:

a torch head operable to receive a cooling liquid; and

a plurality of non-tubular coils disposed generally parallel with one another and with an axis of the handle within the torch to enable the torch head to be displaced relative to the handle, wherein the torch directs the cooling liquid to flow through the coils to and from the torch head.

18. A welding instrument, comprising:

a torch, comprising:

a torch head;

a tripod support system secured to the torch head to flexibly support the torch head, the tripod support system comprising:

a first leg comprising a first spring;

a second leg comprising a second spring; and

a third leg comprising a third spring;

the springs being disposed generally parallel to an axis of a handle support the torch head.

35. A welding instrument, comprising:

a torch head;

a plurality of tubes operable to convey fluids; and

a plurality of coils comprising a helix of non-tubular material defining an axial flow path and secured to the torch head to enable to torch head to be angled relative to the plurality of tubes and to route fluids axially through the coils.

The Examiner relies upon the following prior art as evidence of unpatentability:

Keller	US 4,145,595	Mar. 20, 1979
Willgohs	US 3,999,033	Dec. 21, 1976
Rehrig	US 5,403,987	Aug. 5, 1995
Delgado	US 6,855,905	Feb. 15, 2005

Appellant's Admission of Prior Art (AAPA); Specification 1-2, ¶ [0003]

Claims 18-21 stand rejected under 35 U.S.C. § 102(b) and/or 102(a) as being anticipated by AAPA.

Claims 1, 3, 10, 11, 13-25, 35, and 37-41 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Keller.

Claims 4-9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Keller in view of Delgado. Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Keller in view of Rehrig. Claims 26, 27, and 42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Keller in view of Willgohs.

Appellant does not separately argue with any reasonable specificity the individual claims rejected under 35 U.S.C. § 102 over AAPA (Br. 7-8). Therefore, we select independent claim 18 to decide this issue on appeal regarding claims 18-21. Appellant also does not separately argue with any reasonable specificity the individual claims rejected using Keller, except to focus on independent claims 1, 10, and 35 (Br. 9-13). Thus, we will focus on each of the independent claims to decide this issue on appeal regarding all the claims.

ISSUES ON APPEAL

The first issue is whether the Appellant has shown that the Examiner reversibly erred in rejecting claims 18-21 as anticipated by AAPA.

For the reasons that follow, we agree that the Examiner has established that these claims are anticipated by AAPA.

The second issue is whether the Appellant has shown that the Examiner reversibly erred in rejecting claims 1, 3, 10, 11, 13-25, 35, and 37-41 as being anticipated by Keller.

For the reasons that follow, we determine that the Examiner has established a prima facie case of anticipation with respect to claims 18-25, and also has established a prima facie case of obviousness with respect to claims 26 and 27 dependent thereon in view of the reference evidence, which prima facie case has not been adequately rebutted by Appellant's arguments. However, we reverse the rejections of claims 1, 3-17, 35, and 37-42 for the reasons set forth below. We also enter a new ground of rejection on claims 35, 37, 38, 40, and 41.

Thus, the decision of the Examiner to reject the claims on appeal is AFFIRMED-IN-PART.

OPINION

The § 102 Rejection over AAPA

We determine the following Factual Findings (FF) from the record in this appeal:

1. The Admission of Prior Art (AAPA) in the Specification describes a torch head with three tubes (that is, legs) attached thereto to secure the

torch head to the torch. One tube conveys shield gas, another tube conveys cooling liquid to the torch head and a third tube conveys cooling fluid from the torch head. Each tube is coiled to provide flexibility, and may be flexed to reposition the torch head. Thus, each tube comprises a spring. (See Spec. 1-2, ¶ [0003]). Appellant disputes that these three legs of AAPA comprise a "tripod support system" because the tubes are described as "coiled around each other" (Br. 8).

2. The plain meaning of the word "tripod" includes a three-legged stand or support. [1]

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 827 (1987).

However, the law of anticipation does not require that the reference 'teach' what the subject patent teaches. Assuming that a reference is properly 'prior art,' it is only necessary that the claims under attack, as construed, 'read on' something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or 'fully met' by it. *See Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772 (Fed. Cir. 1983).

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[1] "tripod" *Dictionary.com Unabridged (v 1.1)*. Random House Inc., 04 Jan. 2008 <Dictionary.com http://dictionary.reference.com/browse/tripod>.

Applying the preceding legal principles to the factual findings in the record of this appeal, we determine that the Examiner has properly identified factual findings and reasoning for establishing a prima facie case of anticipation based on AAPA which Appellant has not adequately rebutted by the arguments of record

Implicit in our review of the Examiner's anticipation analysis is that the claim must first have been correctly construed to define the scope and meaning of each contested limitation. *See Gechter v. Davidson,* 116 F.3d 1454, 1457 (Fed. Cir. 1997). During examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Although claims are to be interpreted in light of the specification, limitations from the specification are not to be read into the claims. *See In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

Accordingly, we must first construe the disputed term "tripod support system" as found in the pertinent clause of claim 18 on appeal. According to Appellant's Specification (5-6: ¶ [0020]-[0023]), the welding torch has three tubes (56, 58 and 60) for conveying various fluids and each tube is respectively coupled to another tube (70, 72, 74) via a respective spring 76, 80, 82. Appellant's Specification then states "...the embodiments describe a tripod support system..." (Spec. 7: ¶ [0026])[2]. However, we cannot limit the scope of a disputed term by the preferred embodiments absent an express disclaimer by Appellant of a broader definition. *See In re Bigio,* 381 F.3d 1320, 1325 (Fed. Cir. 2004). Since Appellant presents no express disclaimer

[2] This paragraph and original claim 18 are the only places in the Specification that use the phrase "tripod support system".

in the Specification, we find that "tripod support system" as used in claim 1 includes *any three-legged stand or support* (FF 2).

Using this definition, we determine that the three coiled tubes of the AAPA does meet the disputed claim language. Appellant argues that the three coiled tubes of the AAPA are not a tripod support system because "By definition, the three biasing members of the recited *tripod support system* must be uncoupled..." from one another (Br. 8). We disagree. Appellant has provided no evidence as support for this definition (at Br. 8) of "tripod support system." There is no reason to believe that the three coiled tubes/legs of the AAPA will not function to flexibly support the torch head. For the reasons well stated by the Examiner, the claims do not require that each leg be "uncoiled" or "uncoupled" from one another.[3] The Specification contains no explicit definition of "tripod support system" which requires three uncoupled legs, and we decline to read this into it.

Thus, we agree with the Examiner and determine that the Examiner has established that the AAPA does describe a tripod support system as claimed. We, therefore, conclude that claim 18 is anticipated by AAPA.

For these reasons, we affirm the Examiner's § 102 rejection based on AAPA of claims 18-21.

The § 102 and § 103 Rejections over Keller

We determine the following additional Factual Findings (FF) from the record in this appeal:

[3] We note that Appellant has declined the invitation from the Examiner to amend his claims to explicitly claim this argued but unclaimed distinction (Ans. 10).

3. Keller describes a torch head that may be flexed relative to the body by the construction of a double helix formed of a pair of side-by-side coils embedded in a elastomeric material 28 (col. 4, ll. 13-16; Figs. 3 and 4). The torch body has a bore 29 for conveying shield gas to the torch head (col. 4, ll. 44-51; Figs. 3 and 4).

4. Keller describes that it is feasible to make the double helix of tubular rather than solid wire (col. 5, ll. 19-21). This is useful when it is needed to supply a cooling liquid for the torch through the helix (col. 5, ll. 22-23). "*In this case*, one coil of the double helix serves as a flow inlet and the other as a flow outlet, ..." (col. 5, ll. 24-25, emphasis added). The bore 29 will still provide a passage for the supply of shielding gas (Keller; col. 5, ll. 26-27).

5. Thus, we determine that, when the side-by-side coils of the double helix of Keller are used to provide a cooling liquid to and from the torch head, the coils are no longer "non-tubular".

Applying the legal principles previously set forth with respect to anticipation to the factual findings regarding Keller, we determine that the Examiner has not properly identified factual findings and reasoning for establishing a prima facie case of anticipation based on Keller with respect to independent claims 1, 10, and 35.

In order to meet all the limitations of independent claims 1, 10 and 35, the Examiner's position is that Keller *implicitly* teaches that both a plurality of solid wires and a plurality of tubular wires may be present in the welding instrument (Ans. 11-12). We can not agree. As argued by Appellant, once one follows the sole teaching in Keller to make the wires

tubular to convey cooling liquid to and from the torch head, there are no longer first and second biasing members comprising a helix of non-tubular material in Keller as required by claim 1, nor a plurality of coils of non-tubular material in Keller as required by claim 35.[4] The only express teaching in Keller, as pointed out by Appellant, is to make *each* wire of the double helix tubular to convey cooling liquid to and from the torch head (FF 4 and 5). We do not see any teaching in Keller, implied or otherwise, to have a plurality of tubular wires/coils to convey the cooling fluid to and from the torch head *and* a plurality of non-tubular wires/coils as proposed by the Examiner. Thus, we agree with Appellant that the interpretation of Keller set forth by the Examiner is incorrect and concomitantly that Keller does not anticipate independent claims 1, 10, and 35.

We are constrained by these circumstances to reverse the Examiner's rejections based on Keller of claims 1, 3-17, 35, and 37-42.

However, Appellant has not disputed the merits of this rejection with respect to claims 18-25. Independent claim 18 does not require that any of the springs be made of non-tubular material. Thus, we summarily affirm this rejection with respect to claims 18-25 for the reasons set forth by the Examiner (Ans. 4-5; Office Action, mailed Jan. 18, 2006, paragraph bridging pages 9 and 10). Likewise, since Appellant did not argue the obviousness rejection of claims 26 and 27 which depend therefrom, we affirm the rejection for the reasons set forth by the Examiner (Ans. 7-8).

[4] Likewise, there is no longer a plurality of non-tubular coils, wherein the torch directs the cooling fluid to flow through the coils to and from the torch head, as required by independent claim 10.

For these reasons, we affirm the Examiner's rejections based on Keller of claims 18-27.

NEW GROUND OF REJECTION UNDER 37 C.F.R. § 41.50(b)

Under the provisions of 37 C.F.R. § 41.50(b), we enter the following new ground of rejection:

Claims 35, 37, 38, 40, and 41 are rejected under 35 U.S.C. § 102(b) as anticipated by Keller. The elements recited in these claims read on Fig. 3 of Keller. Fig. 3 of Keller is reproduced below:

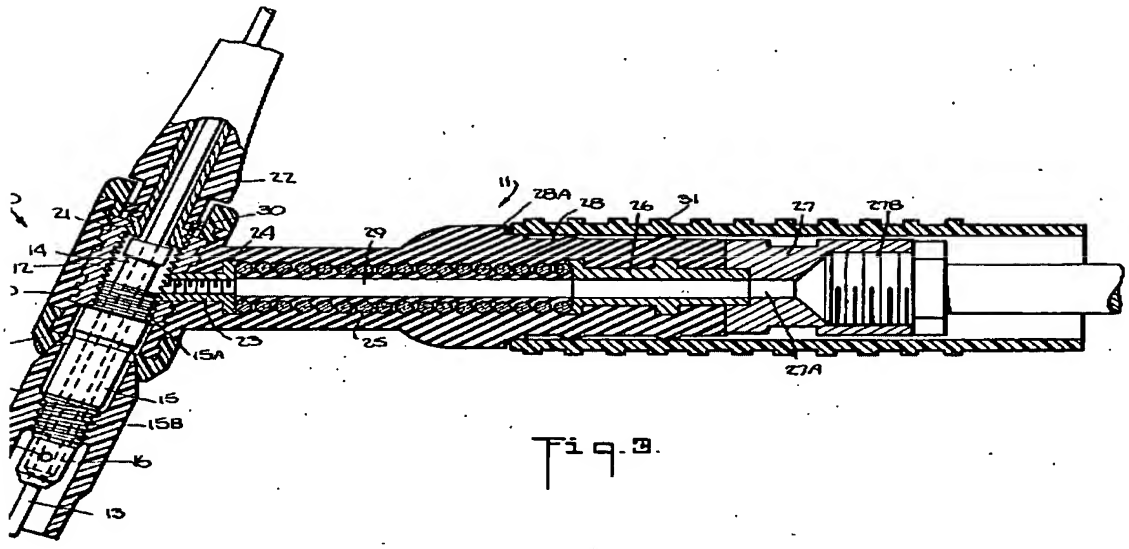

Fig. 3

Fig. 3 of Keller depicts a welding torch. Fig. 3 and the relevant description thereof (see e.g., col. 4, ll. 7-50) teach a torch head with a plurality of tubes (tube 26 and the unnumbered tube to the right of bore 27B) operable to convey fluids (that is, the tubes are capable of conveying fluids) and a plurality of coils comprising a helix of non-tubular material ("...a double helix 25 is formed by a pair of side-by-side coils..." as described in

col. 4, ll. 14-15). These coils define an axial flow path (similar to Appellant's axial flow path within, e.g., coils 76, 80) via the bore 29 and enable the torch head to be angled relative to the tubes and to route fluids axially through the coils (see Fig. 4). Note these claims do not define over two tubes in series nor do these claims recite any structure to require that each tube be connected to respective different sources of fluid.

With respect to claim 37, a first coil of the pair of coils is "adapted to" direct a gas axially through the coil via bore 29 (that is, the coil/bore structure is capable of directing a gas). Likewise, with respect to claim 38, a second coil of the pair of coils is "adapted to" direct a cooling fluid axially therethrough (that is, the coil/bore structure is capable of directing a cooling fluid). With respect to claim 40, each tube is disposed through a tube support member, namely, the connector 27. With respect to claim 41, the elastomeric deformable support member 28 extends through the plurality of coils and is configured to retain a user-determined position of the torch head (see Fig. 4).

CONCLUSION

In summary, the rejections of claims 18-25 for anticipation and of claims 26 and 27 under obviousness are affirmed. The § 102 and § 103 rejections of claims 1, 3-17, 35, and 37-42 are reversed. We set forth a new ground of rejection over claims 35, 37, 38, 40, and 41 as anticipated by Keller.

Regarding the affirmed rejection(s), 37 C.F.R. 41.52 (a)(1) provides "[a]ppellant may file a single request for rehearing within two months from the date of the original decision of the Board."

This decision also contains a new ground of rejection pursuant to our authority under 37 C.F.R. § 41.50(b). That section provides that, "[A] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

Regarding the new ground of rejection, Appellant must, *WITHIN TWO MONTHS FROM THE DATE OF THE DECISION*, exercise one of the following options with respect to the new ground of rejection, in order to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . ; or

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

In order to preserve Appellant's right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejections of claims 18-27, we defer the effective date of the affirmance until after a request for rehearing of the new ground, or, until conclusion of the prosecution for the new ground before the Examiner unless, as a mere incident to the limited prosecution, the affirmed rejections are overcome.

If the Appellant elects prosecution before the Examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED-IN-PART; § 41.50(b)

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